Chapter 16 : Public Health

I. INTRODUCTION

Consistent with guidance in the *City Environmental Quality Review* (*CEQR) Technical Manual*, this chapter assesses the effects of the Proposed Actions on public health. As defined by the *CEQR Technical Manual*, public health is the organized effort of society to protect and improve the health and well-being of the population through monitoring; assessment and surveillance; health promotion; prevention of disease, injury, disorder, disability, and premature death; and reducing inequalities in health status. The goal of CEQR with respect to public health is to determine whether adverse impacts on human health may occur due to a proposed project and, if so, to identify measures to mitigate such effects.

As stated in the *CEQR Technical Manual*, a public health analysis is not necessary for most projects. Where no significant unmitigated adverse impact is found in other CEQR analysis areas, such as air quality, water quality, hazardous materials, or noise, no public health analysis is warranted. If, however, an unmitigated significant adverse impact is identified in other CEQR analysis areas, such as air quality, water quality, hazardous materials, or noise, the lead agency may determine that a public health assessment is warranted.

As described in Chapter 1, "Project Description," the Applicant is seeking a set of Proposed Actions in the form of discretionary approvals to include zoning map and text amendments, a large-scale general development (LSGD) special permit, a City Map Amendment to re-establish a portion of Beach 52nd Street south of Rockaway Beach Boulevard to reconnect with Rockaway Freeway, and public funding and/or financing from various City and New York State agencies and/or programs related to affordable housing development on the Project Site. The Project Site is located in Queens Community District 14 (CD 14). The Proposed Actions would facilitate the Proposed Project to consist of an approximately 2,371,000 gross square feet (gsf) development on the Project Site, comprised of 11 buildings with approximately 2,200 income-restricted dwelling units (DUs), of which 1,927 DUs would be income-restricted up to 80% of the Area Median Income (AMI), to include approximately 201 DUs set aside for Affordable Independent Residences for Seniors (AIRS) senior housing, with the remaining 273 DUs restricted to income levels not exceeding 130% of AMI. In addition to the residential DUs, the Proposed Project would include approximately 72,000 gsf of retail space, including a fitness center and a supermarket, approximately 77,000 gsf of community facility space, approximately 24,000 square feet (sf) of publicly-accessible open space, and approximately 973 accessory parking spaces.

II. PRINCIPAL CONCLUSIONS

The Proposed Project would not result in significant adverse public health impacts. As described in the relevant analyses of this EIS, the Proposed Project would not result in unmitigated significant adverse impacts in the areas of air quality, water quality, or hazardous materials. However, the Proposed Actions could result in unmitigated operational and construction noise impacts as defined by *CEQR Technical Manual* thresholds. As such, it was determined that a public health assessment as to noise was appropriate.

Based on the assessment, it was determined that the noise impacts would not generate a significant adverse public health impact. Without mitigation, significant adverse noise impacts would occur during the weekday AM, midday, and PM peak hours on three residential buildings along Beach 53rd Street due to traffic-generated noise. While certain sensitive receptors could experience elevated noise levels, it would not be large enough (i.e., more than 85 dBA) to significantly affect public health. In addition, temporary increases in noise levels due to construction activities would occur during the daytime and, occasionally,

early evening for some sensitive receptors and construction periods. While during some periods of construction the Proposed Project would result in significant adverse impacts related to noise as defined by CEQR thresholds, the predicted overall changes in noise levels would not be large enough for a sufficient period of time to significantly affect public health.

III. ASSESSMENT

Operational Noise

As described in Chapter 15, "Noise," significant adverse impacts related to traffic-generated noise are predicted to occur on two residential buildings and one office building along Beach 53rd Street during weekday AM, midday and PM peak hours. Significant adverse noise impacts during operation of the Proposed Project are predicted to occur at a residential building at 334 Beach 54th Street (Block 15890, Lot 30) that has frontage on Beach 53rd Street, a residential building at 3-09 Beach 53rd Street (Block 15890, Lot 97), and the Lawrence Nursing Care Center at 3-57 Beach 53rd Street (Block 1890, Lot 42). As discussed in Chapter 20, "Mitigation," field observations will be conducted between the Draft and Final EIS to determine the presence of double-glazed windows and air conditioners (i.e., an alternate means of ventilation) at the noise-sensitive receptors that would potentially experience a significant adverse impact. Based on the results of the field observations, reasonable and feasible mitigation measures (e.g., offering to replace windows and install air conditioners) will be explored in consultation with the New York City Department of City Planning between the Draft and Final EIS. However, if no feasible and practicable mitigation measures can be identified, the Proposed Project would result in an unavoidable significant adverse operational noise impact.

Construction Noise

As described in Chapter 18, "Construction," increases in noise levels due to construction activities would occur during the daytime and, occasionally, in the early evening. For some sensitive receptors and construction periods, the duration and magnitude of the noise levels may constitute a significant adverse construction-period noise impact. Source and paths controls to reduce or eliminate potential significant adverse construction-period noise impacts are listed in the "On-Site Sources of Noise" section of Chapter 18. Even with these measures, significant adverse construction-period noise impacts would occur on portions of the following buildings and nearby locations which have a direct line-of-sight to project-related construction activities: Peninsula Nursing Home, 7th Day Adventist Church, Lawrence Nursing Care Center, 334 Beach 34th Street, 3-09 Beach 53rd Street, and new buildings on Project Site.

Additional measures, as feasible, to avoid potential significant adverse noise impacts will be identified between the Draft and Final EIS. However, if no additional feasible and practicable mitigation measures can be identified, the Proposed Project would result in an unavoidable significant adverse construction noise impact.

Conclusion

The Proposed Project would not result in unmitigated significant adverse impacts on hazardous materials, air quality or water quality. The significant adverse impacts related to operational and construction-period noise would not result in a significant adverse public health impact.

The *CEQR Technical Manual* noise impact thresholds are based on quality of life considerations. These differ from public health considerations, which employ distinct criteria that are appropriate in the public health context. Thus, pursuant to the public health assessment, significance is assessed in terms of the magnitude of noise level and duration of exposure rather than incremental change in noise level. As stated in Chapter 20 of the *CEQR Technical Manual,* these criteria are appropriate because they more closely relate to public health concerns. For example, chronic noise exposure may raise blood pressure and has been suggested to contribute to myocardial infarctions and to interfere with language development in

children. Additionally, prolonged exposure to levels above 85 dBA will eventually harm hearing. Moreover, episodic and unpredictable exposure to short-term impacts of noise at high decibel levels may also affect health. Accordingly, it is appropriate to evaluate magnitude of noise level and duration of exposure when examining public health.

Although the *CEQR Technical Manual* thresholds for significant adverse impacts are predicted to be exceeded at certain locations, the criteria used for public health, (i.e., the magnitude and duration of these exceedances) would not constitute a significant adverse public health impact. As discussed above, the *CEQR Technical Manual* thresholds for noise are based on quality of life considerations and not on public health considerations. An impact found pursuant to a quality of life framework does not imply that an impact will exist when the analysis area is evaluated in terms of public health. The predicted absolute noise levels would be below the health-based noise threshold of 85 dBA at all at-grade receptors. During the construction period, some receptors may experience exterior absolute noise levels above 85 dBA at elevations above the first floor at the building façade—especially those receptors that are immediately adjacent to construction sites and above the height of site-perimeter noise barriers. However, these buildings do not include outdoor terraces. As such, residents at these receptors would not experience exterior levels of construction noise. Accordingly, the magnitude and duration of the construction noise would not result in a significant adverse public health impact.